

61
U.S. FOREST SERVICE

NORTHERN REGION

DIVISION OF STATE AND PRIVATE FORESTRY

INSECT AND DISEASE REPORT

Report No. 71-20

5220
October 1971

FOREST INSECT AND DISEASE DETECTION SURVEY
OF THE HELENA NATIONAL FOREST, MONTANA

by

Hubert E. Meyer, Biological Technician (Insects)
Forest Insect and Disease Branch

During August 1971, those portions of the Helena Forest west of the Missouri River were flown. The following is a brief resume of current conditions.

MOUNTAIN PINE BEETLE, Dendroctonus ponderosae Hopk.--Mountain pine beetle activity continued in the centers of 1969 and 1970 infestations. Many new faded trees were seen in Grizzly Gulch, McClellan Creek, Park Gulch, and the North Fork of Deep Creek. Trees attacked in 1970 were spread over a larger area than the 1969 attacks. Numerous fading pines also occurred below Marysville. Beetle activity seemed to have declined slightly on the Lincoln District. Lincoln Gulch, Park Creek, and Chimney Creek areas seemed to have fewer attacks in 1970 than the 1969 attacks which were evident last year.

DOUGLAS-FIR BEETLE, Dendroctonus pseudotsugae Hopk.--Douglas-fir beetle activity seems reduced on the "east side" and near the Continental Divide on the Lincoln District. Groups that contained five to 20 faders last year, generally have only one to five new faders this year. This trend seems reversed along the western edge of the Forest. Many new small groups appeared from Mitchell Creek below Nevada Mountain north to Helmville and on Moose Creek.

WESTERN SPRUCE BUDWORM, Choristoneura occidentalis Freeman--Spruce budworm has reinfested and lightly defoliated a great deal of the area it infested in past years. Douglas-fir stands above Nevada Lake and most of the east side of the Continental Divide again show defoliation.

Defoliation significantly increased over 1970 in the Big Belt Mountains but is not yet continuous throughout their length.

A total of 92,480 acres of Douglas-fir, spruce and true fir forests suffered aerially visible defoliation by western spruce budworm in the Helena National Forest in 1971.

LEGEND

- 1 - Douglas-fir beetle
- 3 - Pine engraver beetle (*Ips*)
- 4 - Mountain pine beetle

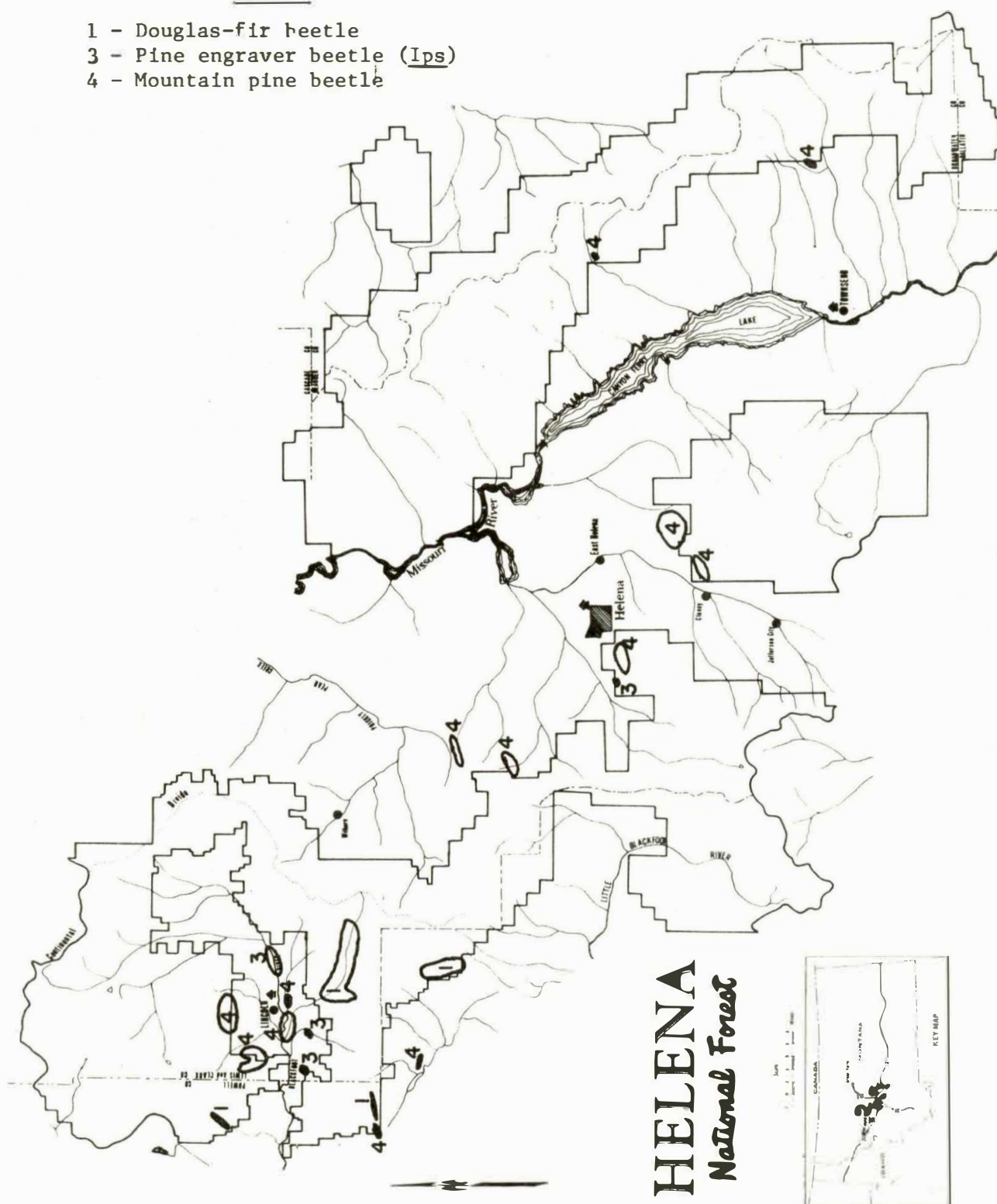
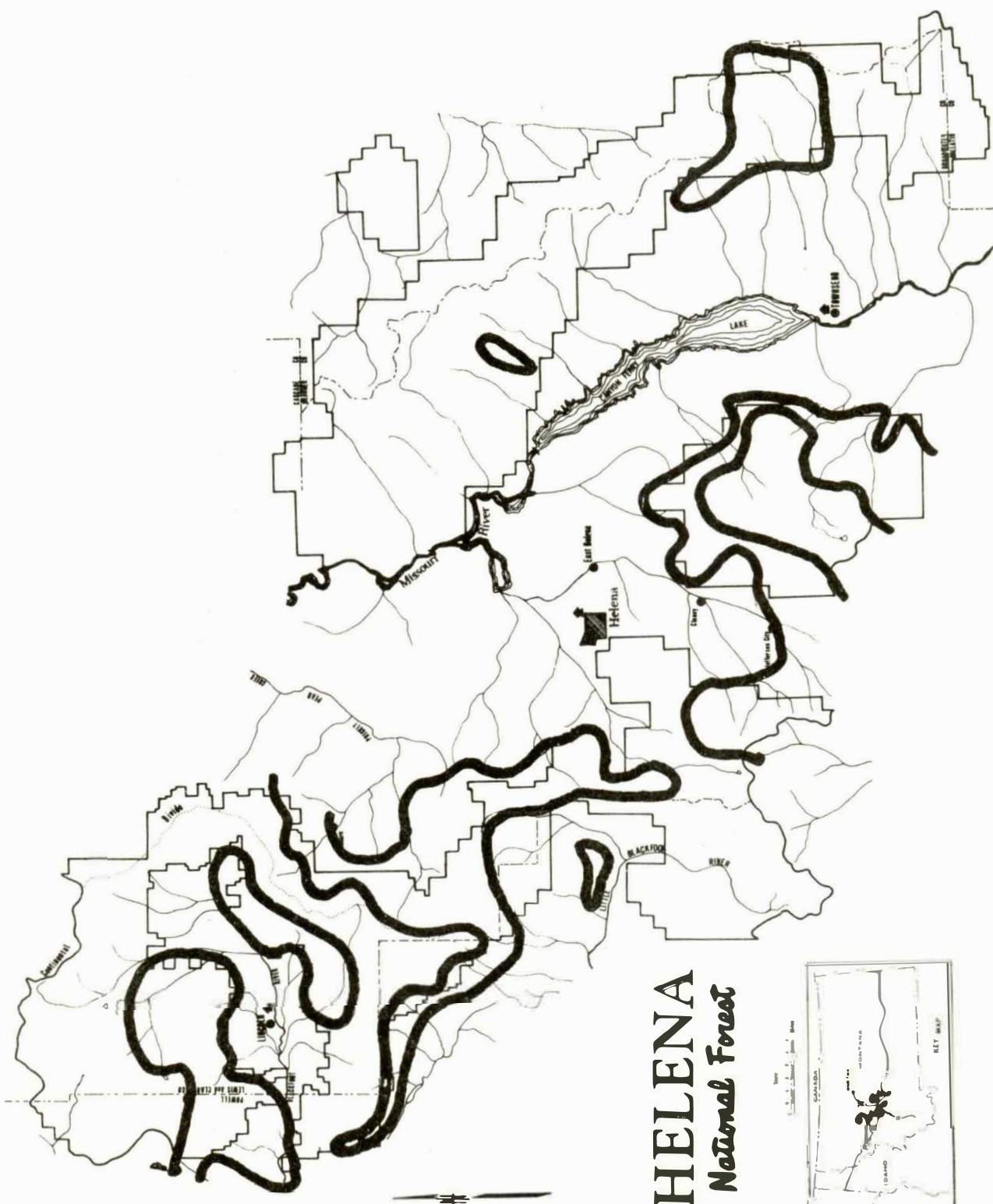


Figure 1.--Major bark beetle infestations on the Helena NF, 1971.



HELENA National Forest

Figure 2.--Aerially visible spruce budworm defoliation, Helena NF, 1971.